The Canadian Light Source: Status Report

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Abstract

The Canadian Light Source, CLS, is presently in the final phase of construction and has begun commissioning of subsystems. The CLS comprises four main systems: a 250-MeV linac, a 2.9-GeV full energy booster, a 2.9-GeV storage ring, and a series of beamlines serving interests ranging from infrared light to hard X-rays. Commissioning of the injection system up to and including the booster ring is expected to be complete in September 2002. The storage ring has a compact lattice consisting of 12 double bend "achromats" sectors, incorporating twelve 5.2-m straights. Three straights will be used for injection, rf, and diagnostics, and the remaining nine will be used for insertion devices (IDs). The initial set of beamlines will include two IR (bend magnet) and five ID sources supplying light to seven beamlines and up to ten experimental end stations. Construction and commissioning of the storage ring and initial phase of beamlines is scheduled to be complete by the end of 2003.

Keywords: Canadian Light Source, linac, booster, storage ring, insertion devices, beamlines

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